

apparatuses as claimed in claim 1, further comprising:

forming electrodes and heating elements on a first substrate of wafer; forming driving fluid barriers on the electrodes and the heating elements; and forming the fluid chambers in the driving fluid barriers, to form the heat driving part.

13. (ONCE AMENDED) A process of manufacturing a plurality of fluid jetting apparatuses, comprising:

forming electrodes and heat elements on a first substrate of silicon wafer, forming driving fluid barriers on the electrodes and heat elements, and driving fluid chambers in the driving fluid barriers, to form a heat driving part;

forming a polyimide coating layer on a second substrate of silicon wafer, forming an adhesive polyimide coating layer on the polyimide coating layer, attaching a first reinforcing ring to the adhesive polyimide coating layer, and separating the polyimide coating layer from the second substrate after attaching the first reinforcing ring on the adhesive polyimide coating layer, to form a membrane;

attaching a second reinforcing ring beneath a third substrate of silicon wafer by a spinning process, forming a nozzle plate on an opposite side of the third substrate from that of the second reinforcing ring, forming jetting fluid barriers on the nozzle plate, forming jetting fluid chambers in the jetting fluid barriers, and forming nozzles in the nozzle part;

adhering the polyimide coating layer of the membrane to the jetting fluid barriers, and separating the second reinforcing ring and the third substrate of silicon wafer, from the nozzle plate; and

adhering the adhesive polyimide coating layer of the membrane to the driving fluid barriers of the heat driving part.

17. (THREE TIMES AMENDED) A process of manufacturing a plurality of fluid jetting apparatuses at once, comprising:

forming a nozzle part on a silicon wafer by a spinning process;

adhering the nozzle part with the silicon wafer to a membrane;

removing the silicon wafer from the nozzle part; and

adhering the membrane with the adhered nozzle part to a heat driving part to form the

fluid jetting apparatuses as an undivided unit.

(ONCE AMENDED) The process of manufacturing a plurality of fluid jetting





apparatuses as claimed in claim 17, further comprising forming the heat driving part, the forming the heat driving part comprising:

forming electrodes and heat elements on a substrate of another silicon wafer forming driving fluid barriers on the electrodes and the heat elements; and

forming driving fluid chambers between corresponding pairs of the driving fluid barriers with the electrodes and the heat elements forming bottom sides of the corresponding driving fluid chambers.



27. (THREE TIMES AMENDED) A process of manufacturing a plurality of fluid jetting apparatuses, comprising:

forming a nozzle part on a first substrate of silicon wafer by a first spinning process; forming a membrane on a second substrate of silicon wafer by a second spinning process;

forming a heat driving part by forming electrodes and heat elements on a third substrate of silicon wafer;

removing first, second, and third substrates from the corresponding formed nozzle part, membrane, and heat driving part; and

adhering the nozzle part to the membrane, and the membrane to the heat driving part to form the fluid jetting apparatuses as an undivided piece to be separated into individual fluid jetting apparatuses.

31. (TWICE AMENDED) A process of manufacturing a plurality of fluid jetting apparatuses, comprising:

adhering a nozzle part to a membrane to form first chambers, each corresponding to ones of the plurality of fluid jetting apparatuses; and

adhering the membrane to a heat driving part to form second chambers separated from corresponding first chambers by the membrane, and to form the fluid jetting apparatuses as an undivided wafer to be separated into individual fluid jetting apparatuses.



44. (ONCE AMENDED) The process of claim 31 further comprising splitting the undivided wafer of fluid jetting apparatus into separate fluid jetting apparatuses.



45. (TWICE AMENDED) A process of forming fluid jetting apparatuses, comprising: adhering a nozzle part having nozzles to a membrane form first chambers, each